



SECOR INTERNATIONAL INCORPORATED

www.secorcom 446 Eisenhower Lane North Lombard, IL 60148 630-792-1680 TEL 630-792-1691 FAX

December 4, 2004

TO:

Mr. Russell Hart, RPM

United States Environmental Protection Agency

Region V

77 West Jackson Boulevard Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated

RE:

MONTHLY PROGRESS REPORT/MEMORANDUM

Area 9/10 Remedial Design

Southeast Rockford Groundwater Contamination Superfund Site

Rockford, Illinois

Copies:

Mr. Thomas Turner, Regional Counsel, USEPA Region V

Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation

Ms. Kathleen McFadden, United Technologies Corporation

Mr. Thomas Williams, PM, IEPA

Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: (activities, meetings, deliverables, etc.) Activities conducted in November 2004 consisted of implementation of continuing Pre-Design Investigation activities. In particular, these activities consisted of the installation of four additional monitoring wells on the Hamilton Sundstrand plant property. Three of these monitoring wells were installed in the southwestern portion of the plant (a.k.a. South Alley) and are identified as SMW-20, SMW-21, and SMW-22. The fourth monitoring well (SMW-19) was located in the northeastern portion of the Hamilton Sundstrand plant property in an area approximately down-gradient of the former Mid-States facility (2401 11th Street).

Soil boring and monitoring well installation activities were undertaken during the first week of November 2004. Two soil samples were selected from each of the monitoring well locations for laboratory analyses. Samples were analyzed for diesel range organics (DRO) for the presence of jet fuel (USEPA SW-846 Method 8015B) and volatile organic compounds (USEPA SW-846 Method 8260B). Results from these soil samples are anticipated to be received in early December 2004 and will be forwarded to USEPA in the next progress memorandum.

Soil conditions encountered during the soil boring/monitoring well installation activities were similar geologically and hydrologically to other investigative locations within Area 9/10. The geologic profile consists predominantly of medium sands with some gravel. Groundwater was encountered in an unconfined state at approximately 32 feet to 34 feet below surface grade. There was no field evidence (odors, staining, field head space readings) that indicated any significant impacts to soils or the presence of non aqueous phase liquids

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(NAPL) in the unsaturated soils above the water table. There were no field observations made while drilling that indicated the presence of NAPLs in the soils at or below the water table.

During development activities for the four new monitoring wells, there was some detectable odor in the development water removed from the three new locations in the South Alley (SMW-20, SMW-21, and SMW-22). There was no evidence of any NAPL present in the development water.

The four new monitoring well locations were surveyed by an Illinois licensed land surveyor for incorporation and use with the existing monitoring wells within Area 9/10.

Groundwater samples were collected from these newly installed monitoring wells, as well as all of the other monitoring wells previously sampled as part of the Pre-Design Investigation. The inclusion of all previous monitoring wells in this sampling effort was done to provide additional data in support of future activities. The three existing wells (MW-201, MW-202, and MW-203), which are part of the Site-wide groundwater monitoring network for the Southeast Rockford Groundwater Contamination Superfund Site, were sampled with the assistance of Anderson and Egan, sub-consultant to the City of Rockford for long term groundwater monitoring. These three wells are fitted with dedicated pumping equipment to facilitate sampling for long term monitoring purposes. Prior to sample collection, all wells were gauged for elevation and purged (minimum three well volumes). During purging, measurements of pH, conductivity, and temperature were monitored along with visual conditions. Groundwater samples were collected in new, clean, laboratory provided containers for DRO (jet fuel) and VOC analyses.

Investigation derived wastes (IDW) generated from soil boring/monitoring well installation activities consisted of solids (drilling spoils) and liquids (development and purge waters and decontamination water). These IDW materials were containerized in 55-gallon steel drums and will be stored on-site until being removed for disposal/treatment. Off-site management of IDW materials is being performed by Clean Harbors. Clean Harbors maintains waste disposal/treatment contracts Hamilton Sundstrand.

These additional investigation activities were approved by USEPA in a letter dated September 30, 2004.

As a follow on to testing of alternative product recovery equipment in the eastern portion of the South Alley (RW-3 and RW-1), arrangements were made to remove and reinstall recovery well RW-3. It was determined during the evaluation that RW-3 is partially obstructed with the remains of another historical product removal pump. RW-3 has recently shown an expression of light non-aqueous phase liquid (LNAPL) between two and three inches in thickness. Further details on the replacement of RW-3 are provided below.

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FUTURE PROJECT ISSUES/STATUS: (activities, meetings, deliverables, etc.)

Future project activities for December 2004 will include the removal and installation of a replacement recovery well at the location of RW-3 in the South Alley on the Hamilton Sundstrand facility. In addition, it is anticipated that the laboratory results from the four soil borings that were completed as shallow monitoring wells (SMW-19, SMW-20, SMW-21, and SMW-22) will be received. Groundwater laboratory analytical results from the samples collected in November 2004 from all of the existing and newly installed wells should also be received from the laboratory in December 2004. Upon receipt, these raw data (prior to validation) will be provided to the USEPA in the next monthly update memorandum. These soil and groundwater analytical results will be compiled with other existing analytical data for evaluation. Land surveyor data from the monitoring wells installed in November 2004 will be combined and incorporated into existing elevation/location data. Depth to groundwater data collected in November will then be incorporated to develop a groundwater contour map inclusive of all current well points (in the Pre-Design Investigation activities area).

The replacement of RW-3 has been scheduled for the first week of December 2004. Based on the utility concerns in the area of RW-3 and the South Alley in general, it is intended that the replacement well will be installed in the same location as the existing RW-3. The process is anticipated to involve removing the existing RW-3 by over-drilling (open end hollow stem auger) around the existing casing to remove the cement grout and then pulling the casing from the ground. If removal is successful, the replacement well will be installed in the same location/borehole. The replacement well will be constructed of four-inch diameter stainless steel well casing and screen. The screened interval will extend at least five feet above the current water table and approximately 10 feet to 15 feet below the water table for a total of 20 feet of well screen. If removal of the well is unsuccessful, the well will be relocated approximately two feet east of the current location.

Once the replacement/new well is installed, a Flexible Arial Peristaltic Plus (FAP®) pump system will be deployed for product recovery. As indicated in the previous monthly progress memorandum, this type of system is considered to be safe and effective as it is air-driven and provides the sensitivity for thick and thin layer product recovery operations. New recovery pumps will be placed in both RW-3 and RW-1. The systems will consist of a FAP® pump with a four-inch specific density float. The pump systems will be connected to the previous (existing) system's air and discharge lines. Recovered product will be captured in approximately 15-gallon storage vessels located within the plant near each recovery well location. The amount of product recovered will be monitored and recorded. On-going recovery progress information will be provided in these monthly progress memoranda.

The issue of direct removal (excavation) of near surface soils in the former RCRA outdoor container storage area (OSA) has been discussed between USEPA, IEPA, and Hamilton Sundstrand as a potential interim action with respect to source removal. Logistical issues concerning excavation depth, slope stability, shoring versus alternative excavation procedures (trench box, small scale pit and fill, etc.) for protection of subsurface and surface structures are being considered. An active railroad spur and a major thoroughfare (9th

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Street) form two sides of the area of the concern. A fiber optic communications cable is located parallel to 9th Street beneath the sidewalk which abuts the OSA on the west. It is anticipated that these discussions will continue and become more specific in detail as to the approach and outcome effects with regard to the disposition of the OSA within the realm of CERCLA and RCRA.

SAMPLE/TEST DATA SUBMITTALS:

No sample/test data submittals are included with this memorandum.

RD SCHEDULE UPDATE: (attach updated schedule as necessary)

As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. Based on the completion of well installation and groundwater sampling conducted in the second half of November 2004, analytical data should be available in early December 2004. These results should provide information to move forward with a more focused, cost effective RD for this portion of Area 9/10.

Also, it is anticipated that discussions with USEPA and IEPA concerning the direct removal (by excavation) of near surface impacted soils in the OSA will ensue such that this activity could take place in the spring of 2005.

Hamilton Sundstrand will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

REALIZED/ANTICIPATED PROBLEM CONDITIONS:

None.

PERSONNEL CHANGES:

None